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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 03K099/PCT	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/KR2003/001586	International filing date (day/month/year) 07 AUGUST 2003 (07.08.2003)	Priority date (day/month/year) 10 AUGUST 2002 (10.08.2002)
International Patent Classification (IPC) or national classification and IPC IPC7 H04Q 7/22		
Applicant SK TELECOM CO., LTD. et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 10 MARCH 2004 (10.03.2004)	Date of completion of this report 29 NOVEMBER 2004 (29.11.2004)
Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer JEONG, Hae Kon Telephone No. 82-42-481-5986 

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/KR2003/001586

I. Basis of the report

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed
- ☐ the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the claims:
 pages _____, as originally filed
 pages _____, as amended (together with any statement) under Article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the drawings:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

- These elements were available or furnished to this Authority in the following language _____ which is
- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed." and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-22	YES
	Claims		NO
Inventive step (IS)	Claims	1-7, 15-22	YES
	Claims	8-14	NO
Industrial applicability (IA)	Claims	1-22	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

D : KR2001-0095885 A (7 November 2001)

Claims 1-7 of the present invention relate to a method of managing ring-back sounds in a subscriber-based ring-back sound service, comprising: the first step of storing common ring-back sounds and reporting details of use of the common ring-back sounds to a ring-back sound management server, in each of Intellectual Peripherals(IPs); the second step of storing individual ring-back sounds and reporting details of use of the individual ring-back sounds to the ring-back sound management server, in each of large capacity storage devices connecting and interworking with one or more IPs; and the third step of statistically compiling the reported details of use of the common and individual ring-back sounds and determining whether to maintain storage of the common and individual ring-back sounds based up the statistically complied details, in the ring-back sound management server.

Claims 15-22 of the present invention relate to a method of changing ring-back sounds in a subscriber-based ring-back sound service, comprising: the first step of providing a first information about whether to substitute for an existing ring-back tone and a second information for performing routing to a ring-back sound provision means, preset in a Home Location Register (HLR) at a time of registering a location of a terminating subscriber, from the HLR to corresponding terminating MSC; the second step of providing a ring-back sound to a corresponding originator or requesting a trunk call connection from the ring-back sound provision means in response to the provided first and second information when perceiving that an originating MSC requests a call connection to the terminating subscriber in the terminating MSC; the third step of searching for a ring-back sound code preset in connection with a phone number of the terminating subscriber after performing the trunk call connection in response to the request of the trunk call connection, and providing a ring-back sound corresponding to the searched ring-back sound code to the originator via the connected terminating MSC, instead of the ring-back tone, in a ring-back sound provision control means; the fourth step of requesting disconnection of the trunk call connection from the ring-back sound provision means when perceiving that the terminating subscriber answers the call in the terminating MSC, and disconnecting the trunk call connection in response to the request of the trunk call disconnection by the ring-back sound provision means; the fifth step of creating a message, including a special number, a terminating phone number and an originating phone number, based upon information of the special number selected by the originator while trying a phone call and transmitting the message to the HLR in the originating MSC; the sixth step of transmitting a message requesting change of a ring-back sound code to the ring-back sound provision control means in response to the received message in the HLR; and the sixth step of transmitting a message requesting change of a ring-back sound code to the ring-back sound provision control means in response to the received message in the HLR; and the seventh step of substituting the ring-back sound code preset in connection with the terminating phone number for a ring-back sound code preset in connection with the originating phone number in response to the message requesting change of a ring-back sound code in the ring-back sound provision control server.

(Continued on Supplemental Sheet.)

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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of:

Box V.

2. REASONED STATEMENTS - CITATIONS AND EXPLANATIONS

The technical feature of claims 1-7, 15-22 is not disclosed in D. Thus claims 1-7, 15-22 are inventive under PCT Article 33(3).

Claims 8-14 are characterized in an originator's selecting a ring-back sound present from a ring-back sound presentation server; transmission of the ring-back sound present to a receiver's mobile terminal in a type of short message by means of a short message server; and the receiver's accepting of the ring-back sound present according to the calling-back information of said short message, which is similar to the technical feature of D wherein a client logs on a ring-back sound presentation server and requests to download a ring-back sound; the server transmits the requested ring-back sound file to the terminal appointed by the client by using SMS. Though D does not disclose the art of calling-back as disclosed in claims 8-14, to log on various contents using the calling-back function is considered conventional.

Thus, the subject matter of claims 8-14 does not involve an inventive step under PCT Article 33(3).

The industrial applicability of claims 1-22 is self-evident under PCT Article 33(4).